ARCHITECTVRE

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PROFESSIONAL COMMENT.

AS far as New York City is concerned, the advocates of reinforced concrete construction will have to desist from their usual argument that this form of construction should commend itself to the architect on account of the possibility of performing much of the work with unskilled labor. The Bricklayers' Union recently communicated with the Mason Builders' Association, stating: "That notice be herewith given to the Mason Builders' Association, to all general contractors who are not members thereof, and to all architects in the City of New York, that whenever and wherever concrete is used in building construction within the limits of said municipality the work must be done by union bricklayers, none of whom will hereafter seek or accept employment from any contractor, owner or architect that fails to comply with this requirement." Under this notice the bricklayers will insist not only on laying concrete and terra cotta blocks and making concrete floor arches, but also on the right to pour concrete in the framework of walls of reinforced concrete, hitherto done by laborers, at the regular bricklayers' wages of seventy cents an hour. The work of laying concrete blocks is also regarded as bricklayers' work.

IT is now "up to" the architects and electrical engineers to prepare their electrical drawings so that they will be "esperanto" to the entire country. As a result of the work of the Committee on Uniform Symbols of the National Electrical Contractors' Association, a series of signs and symbols has now been issued to the architects and engineers; and if any one has not received the card it can be obtained from the Secretary of the Association.

EVEN at thirty-five dollars a month people are beginning to demand architecture in their homes. Witness the advertisement of the hundreds of two-family houses being offered in the suburbs of Brooklyn and the Bronx. "You will be charmed with the architecture of these houses. The best architects have designed these comfortable dwellings." And all of it may be had for thirty or thirty-five dollars a month or "On easy payments." Seriously, the architect has an opportunity here to turn his thoughts to the betterment of social conditions, for these little houses for two families are designed for workmen and small trades people and the democratizing of art and the consequent improvement of taste is no mean goal for the best of us. It is interesting to note, too, that from the owners' point of view it is a step in advance. These houses are for the most part built in new neighborhoods far ahead of the improvements and rise in value resultant on the improvements, and act in very many instances as tax-payers. It is an evidence of advance that the speculative owner is willing to invite his prospective tenant with the bait of architecture rather than that of expediency of access or cheapness of rent.

THE total amount of timber now standing in the forests of the United States is estimated at 1,475 billion feet, but the annual cut per year is 45 billion feet, which would mean the total destruction of the forests in 35 years, not counting any increase in the cutting. In this connection it is interesting to observe that the building trade in this country must shortly look towards a substitute for wood in many of the operations, and considering, too, the advancement that has been made in sheet metal stamping, it is not unlikely that sheet metal of various forms will be more largely used than concrete, which is, at the present, playing such an important part.

THE Regents of the University of Ann Arbor, Michigan have established a Chair of Architecture as a branch of the Engineering Department. Emil Lorch, of Harvard, is the new occupant of the Chair at a salary of $2,500 a year.

WE may in time outgrow all forms of mimetic art and cultivate pure decorative art in abstract color and form. But in the meantime, is it not somewhat presumptuous in us to assume that our statuary and painting will be admired for thousands of years to come, as we do when we use bronze and marble, mosaic and plaster as the materials?

ONE of the most valuable applications of electricity to simplify household affairs is the thawing transformer. The usual method of thawing a frozen pipe is by means of a fire and more recently by the use of steam. A transformer is used so that a suitable electrical pressure may be obtained, whatever may be the pressure of the supply mains. In thawing street mains it is only necessary to make satisfactory electrical connections to a hydrant and the pipe which is beyond the frozen part, thus obviating the great inconvenience and expense which the laying open of streets, in order to get at a frozen main, entails. An example of the time saved by the new method is on record. A six-inch water main was frozen for some distance at a place where it was taken over an arched stone bridge. A force of laborers did the work in six weeks in the usual way, but when next year the thawing electrical transformer was set at work, the work was done in less than six hours.

THE PENNSYLVANIA STATE CAPITOL BUILDING.

THE Capitol consists of a main building, with imposing facades and two wings, equally impressive as to mural ornamentation and design.

The designs of everything in the structure are of special creative workmanship. Every chair, clock, chandelier, divan and mantel are in harmonious design with the apartment as a whole.

The elaborate bronze work designed by the architect was executed by the Henry-Bonnard Bronze Co. of New York and Mt. Vernon.

The granite carving, the ornamental plaster work and the modeling for all architectural exterior and interior decorations were executed by Buehler & Lauter.

Comparative statements convey some adequate conception of this magnificent building.

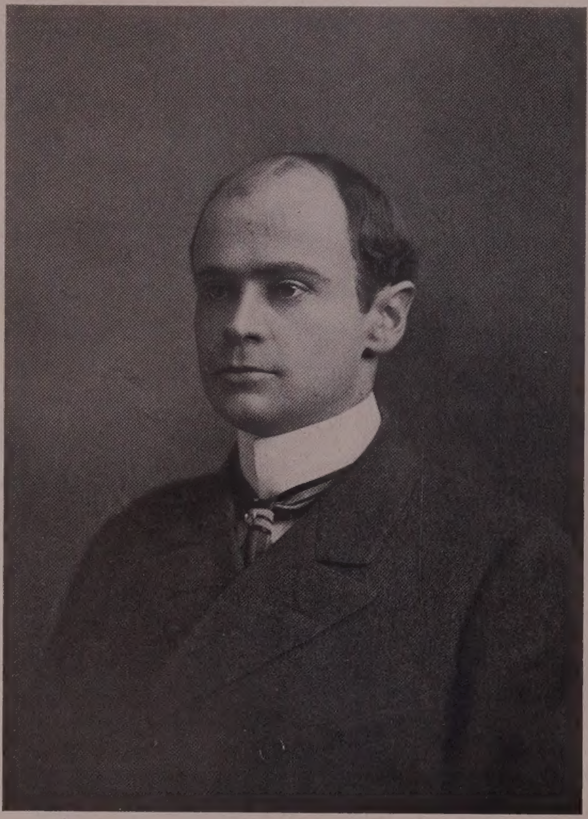
The length of the Capitol building is 525 feet; its breadth 254 feet. The height from the ground floor to the top of the allegorical figure surmounting the dome is 292 feet.

The area of the building is 86,275 square feet, or 2,000 square feet larger than St. Paul's in London. It is longer than famous Westminster Abbey.

In its construction 25,000 separate pieces of granite were used, weighing from one to thirty tons each. There are thirty-two magnificent monoliths in the structure, weighing, thirty-five tons each. A total of more than 350,000 cubic feet of granite was used on the exterior of the building alone, or something over 1,100 carloads of that material, furnished by the Woodbury Granite Co., Hardwick, Vt.

The building covers a trifle more than two acres of ground, and if a man started to walk around the completed structure, following all the embrasures and offsets, he would walk half a mile before reaching his starting point.

Every continent on the globe has contributed in some way, in wood, metal, marble, glass or other material, to its beautiful perfection, while artists and sculptors of world-wide repute have, with brush or chisel, in mosaic skill or leaded-glass grace, helped to make the massive pile what it is to-day.



Architects of To-Day.

MR. J. MILTON DYER, CLEVELAND.

The weight of the dome, which is the crowning beauty of the building, is 52,000,000 pounds.

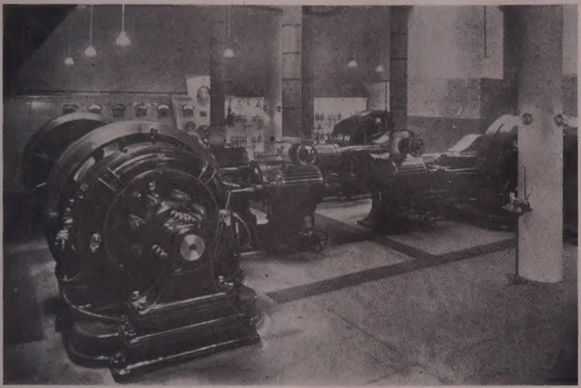
When completed the cost of the structure and its furnishment will be about $9,000,000.

A brief description of the electrical features in the construction of the building will be of interest at this time, not only as an illustration of what an important public building requires in the way of electrical equipment, but also because of some special features which make this installation a unique one.

The building is equipped with a generating plant for electric lighting and power, two telephone and two telegraph exchanges, and sundry signaling systems, which will be described below. All of these were installed by the Keller-Pike Company of Philadelphia, who were selected on account of their wide experience with installations of this magnitude.

The generating plant consists of four 150 kilowatt direct connected units, operating at 230 volts. These machines, which are illustrated in the following cut, consist of Fleming side crank engines and C. & C. multipolar generators. Both engines and dynamos are of the newest type, and they have given excellent service ever since the plant was first started in February, 1905. From that time until the completion of the building, the plant has been in operation day and night to furnish light needed in the construction of the building, and although the conditions imposed by this service have often been most severe, there has never been a moment's interruption in the operation of the plant.

The white marble switch board, shown in the second cut on the following page, is of unique design. Instead of the usual complement of straight panels, the center one is made in the form of a keystone, to represent the State of Pennsylvania. It was the original intention to place six panels on either side of this, making up the total of the thirteen states comprised in the original Union, but unfortunately the technical difficulties which arose made it necessary to use seven panels on either side of the center one. On the Keystone panel are mounted the pressure gauges for both steam and electricity. The panel to the left marked "Street" contains switches so arranged that the light or the power load, or both, may be thrown either on the generating plant or on the street connection of the Harrisburg Central Station. As the switches are shown in the cut, both the light and the power load are on the generators. The next four panels marked "1," "2," "3" and "4" are for the four generators which are connected to them by means of lead cables of 1,200,000 circular mils capacity, car-

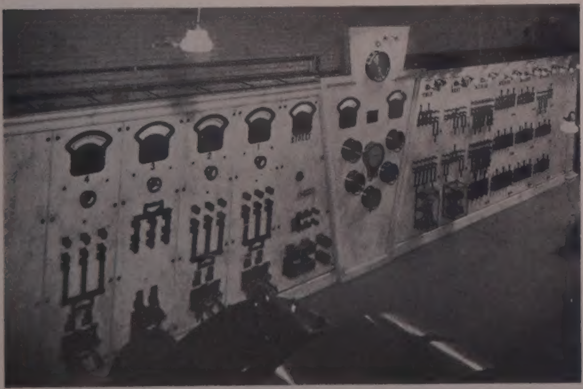


ried in concrete ducts under the floor of the engine room. The generator panels are of the usual design. The two blank panels on the extreme left are intended for additional units to be installed at some future time. The first panel to the right of the Keystone contains switches for all of the power circuits and a watt-meter for measuring the power consumed on these circuits. The next panel contains the switches for the night circuits and a watt-meter for measuring the total current consumed in all the lighting circuits. The next four panels marked "Interior" contain the circuit switches for the various centers of distribution throughout the building. The blank panel on the extreme right is intended for the switches controlling the outside lighting circuits to be installed at some future time.

The distribution of current throughout the building is on the 220-volt, two-wire system. There are sixty-one panel boards or centers of distribution in the building, from which the branch circuits are carried to the lights. These marble centers are constructed in the usual way, with sheet iron boxes and marble linings forming a gutter, covered by hard wood trims. The doors are made of heavy plate glass. All of the wires are rubber insulated carried in iron conduits.

The telephone service as originally designed, consisted of several local systems in the various departments, with a few trunk line connections to the more important centers in the building. After the needs of the various departments became better known, however, the original idea was abandoned and a complete long distance connection for both the Bell Telephone service and that of the United Telephone & Telegraph Company was installed in each important room in the building, there being 327 rooms which are equipped with long distance connections for both telephone systems.

The telegraph system consists of call boxes in 278 rooms for both the Western Union and the Postal Telegraph Company. The signal system comprises push buttons on each desk in both the Senate and the House, indicating on annunciators located in the ante rooms, and in addition there are various systems of call bells, so arranged that they may be operated to ring in the committee rooms by the clerks of the Senate and House when sessions are called to order. All of the wires throughout the building, not only for lighting and power, but for the telephone, telegraph and signal systems are carried in iron pipes so that they may be removed without disturbing the finish in the building.



*AN ARTISTIC CONCRETE DWELLING OF ORIGINAL AMERICAN ARCHITECTURE.

By Albert Moyer, Assoc. Am. Soc. C. E.

"All my gods dwell in temples made with hands."

I WISH to present to your mind the beautiful and inexpensive results which can be obtained by treating Portland Cement Concrete as a definite plastic material, eliminating all thought of imitation and machine made product.

Most beautiful columns, capitals, flower-pots, fountains and statuary can, and have been made with concrete in exact model of those found in the old Italian gardens, rivaling the original both as to modeling, texture and color.

It, however, is not my purpose to describe this form of artistic treatment of concrete but rather to offer some practical suggestions for the use of concrete when applied to the construction of residences or dwelling houses.

Concrete is not an imitation or a substitute; it is a definite material in itself offering opportunities more abundant than found in any other building material.

The broad minded and æsthetic architect of to-day schools his mind to think in terms of the material he intends using, originating a design and plan for either stone, brick, concrete or frame. The beauty of the house is marred if he designs for brick and uses frame, or designs for stone and uses concrete.

We respond to the human touch; there is no sympathetic chord in machinery. Concrete is plastic and shows the touch of the human hand.

The design required by concrete is vastly different from that which is adapted to brick, frame or stone. Plasticity and molded form are the thoughts connected with Portland Cement Concrete. These thoughts are not relevant to any other building material with the possible exception of adobe; in designing a concrete house the first thought is of an original molded form which to be beautiful must be simple; economy must also be considered. The board forms or molds should be used over and over again thus minimizing in cost of carpentry and lumber, which is one of, if not the principal cost of concrete construction. This can be accomplished by repetition of design and uniform size and spacing of pilasters. By this method beauty is also obtained for nature always works along the line of least resistance.

The design and plan should be convenient, simple and plain; a design which signifies molded form. There should be no sham; the material used should stand for what it is; the board forms should be of a rough lumber and the exterior of the wall rough, giving nature full swing, eliminating all evidence of machinery. Carrying out this thought, we would

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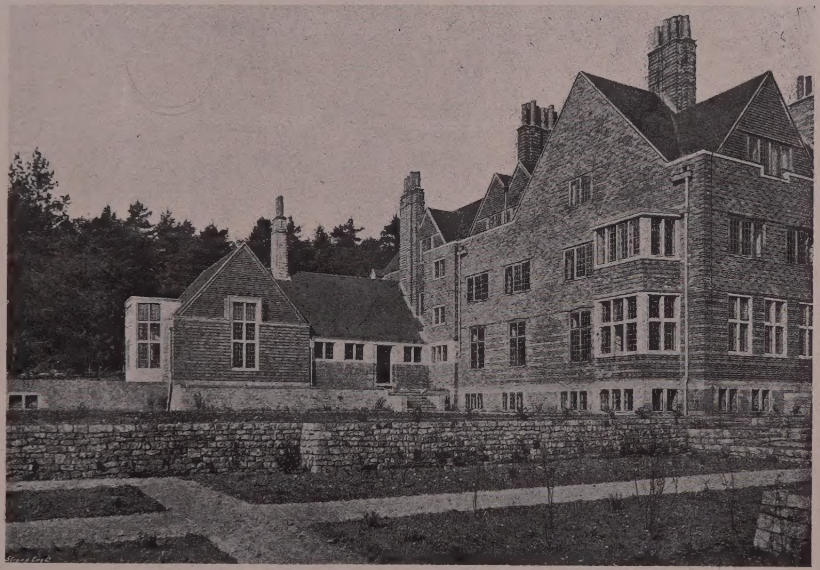
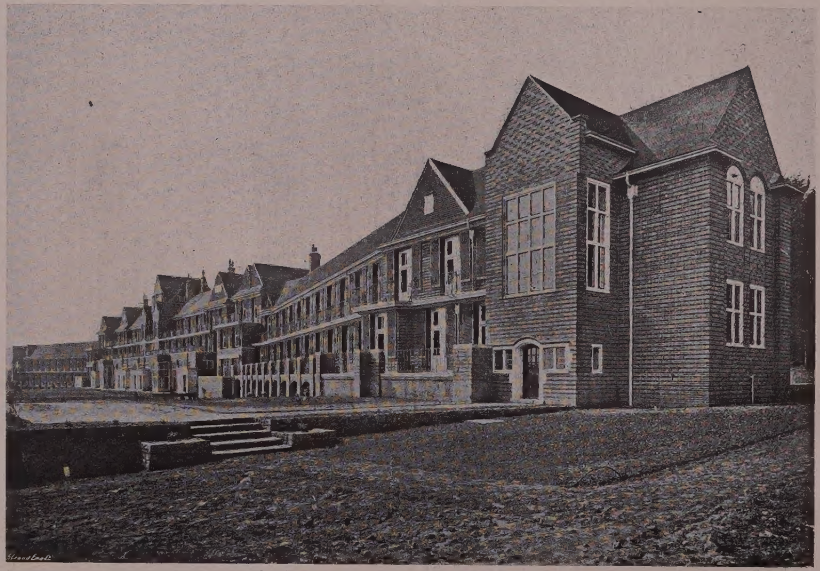
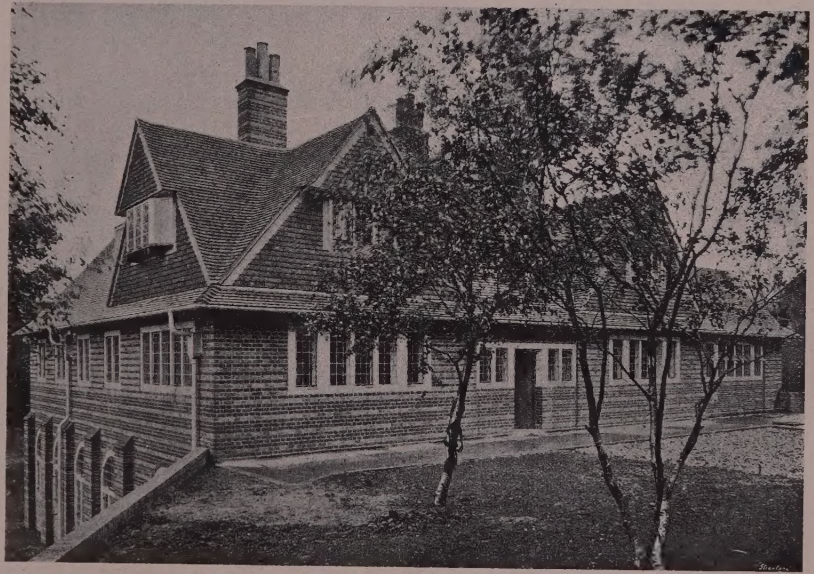


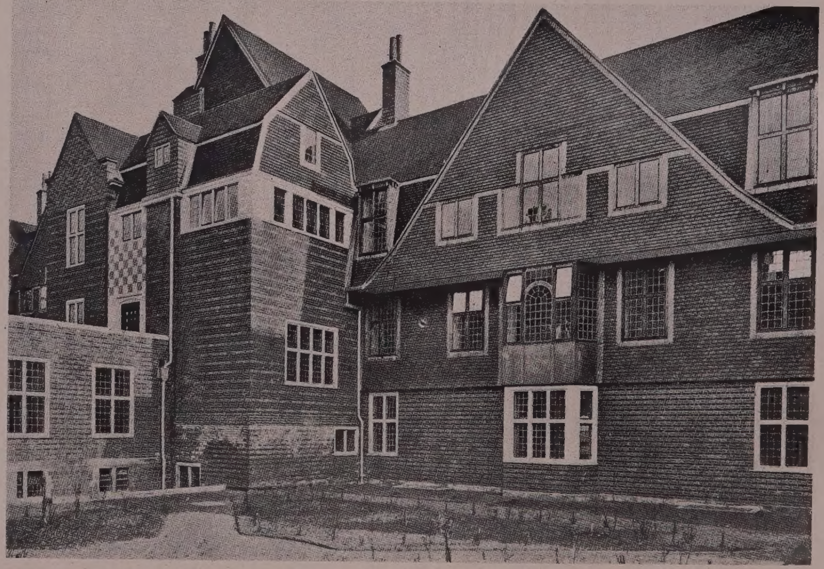
THE MEDICAL OFFICERS' QUARTERS. H. Percy Adams, Arch.



GENERAL VIEW OF PATIENTS' BLOCK. H. Percy Adams, Arch.



LAUNDRY AND ENGINE BUILDING. H. Percy Adams, Arch.



DETAIL, NORTH FRONT OF PATIENTS' BLOCK. H. Percy Adams, Arch.

MONTHLY PICTORIAL REVIEW OF OUR ENGLISH CONTEMPORARIES—THE KING EDWARD VII SANATORIUM, MIDHURST, SUSSEX.

(Continued from page 167)

wish that the boards used could be hewn by hand and leave their mark on the concrete surface.

This is not a treatise on architecture; the suggestions which follow, I trust will prove a seed well planted. In offering these suggestions I do not intend to design a house and give plans and specifications—that is the architect's privilege.

There have been whisperings of an original well defined American architecture. Is it not possible that this new architecture will be simple, plain and of molded form? It is not a fanatical prediction that this new architecture will spring from concrete.

The architecture employed in our cities and even some of our handsomest country places has been justly criticised as cold and unsympathetic. The cause has been attributed to haste and too much commercial spirit, resulting in a poor imitation of a mass of architecture copied in the older countries which in the original often mellowed by age, pitted and stained by the elements and in appropriate surroundings, is beautiful in the extreme, but when copied in brick, terra cotta, new stone or frame, and transplanted; too often becomes cold unsympathetic and even ugly. What is wanted is originality appropriate to surroundings and true to nature. The thatched hut of the West Indies, the adobe dwellings of our southwest, the log and mud cabins of our south are at times beautiful for the reason that the surroundings are appropriate, the material most convenient and the evidence of human touch preserved. All of which may be said of concrete if properly and originally employed both as to design and treatment,

For ages past we have neglected the first law of nature, spending most of our lives in a dwelling which is little better than a fire trap. Calamities such as the Baltimore fire, San Francisco earthquake and fire are only temporary as such, the lessons they teach arouse our mind to action. A concrete dwelling the walls of which are plain or partially reinforced, girders and floors of reinforced concrete, is not only the most economical but far the best for resisting fire and earthquake.

Structural suggestions assist the architect in devising a design most appropriate, convenient and in accord with the material used.

The walls should be in the form of solid or plain concrete pilasters, and curtain walls reinforced with wire mesh; or an entirely solid plain concrete wall of sufficient thickness, nine to twelve inches, to avoid the use of pilasters.

The concrete wall left just as molded, (if proper aggregates are used), may be made to give the effect of having been pitted by the action of the elements and the color mellowed by age. No flat shade is noticed, but rather various shades of mottled gray or buff as may be desired. These effects are all produced by natural methods, a mixture of various aggregates of several kinds and colors; stone graded in sizes from half inch down to particles the size of coarse sand, possibly a few broken brick and if a few cinders added prove to give the desired results, they may safely be used. The proportion of cement necessary to give required strength can only be obtained by experiment; little or no sand need be employed and no mortar-stains.

The broken stone and broken brick must show on the surface. The surface should be washed with water from a hose and brushed with a broom as soon as the board forms are removed; if mixed too wet the cement and mortar will be driven against the board forms giving a plaster finish of dead gray flat color covering up the color and essential feature of the concrete. The effect produced will be accidental and natural, we have been faithful to nature so have no fear as to results. A plaster finish or stucco effect is in the nature of an imitation and therefore wrong from a strictly artistic standpoint. Some architects have obtained similar effects by using a concrete made of cement, sand and different colored pebbles, the pebbles exposed by brushing away the mortar on the surface while new, this method is artificial, such beauty as is obtained is vain, it seeks admiration.

The shade and texture required necessarily depend on the surroundings. If the house is set back among old trees, possibly a medium or dark gray with slight buff tint might prove appropriate. If set out on a lawn near the street, a light gray would seem best suited. Texture, color and shade may be obtained by previously experimenting with various aggregates or mixtures made up into concrete molded by board forms similar to the boards which will be used. The test pieces to show a surface of about two feet square. After removing the board forms say twenty-four hours, these test pieces of concrete should be set on edge out in the open where the sun and the rain will reach them. No cement or cement mortar should plaster against the board form; if this results the mixture has been too wet and the texture of genuine concrete spoiled. Construction and material should be frankly acknowledged. Such a wall is not an imitation but shows on its face that it is honest and genuine clear through. If pilasters are used they should be so spaced that the board forms may be used over and over again in different parts of the building, the concrete can be conveniently placed in layers three feet high all around the building; these same board forms then moved up three feet to the next layer; the forms being supported by uprights braced and carried to the height of the building. By this method it is possible to lay three feet of wall in height every twenty-four hours. Some critics of concrete have raised objection to this method of procedure saying that the joints between the boards will show on the concrete; what if these joints do show, we are simply frankly acknowledging the material used and methods employed. A few years hence such a criticism may be laughed at. We might as well object to joints between blocks of solid marble. Concrete as universally employed to-day might be ugly if so treated, but I am not speaking of concrete employed for retaining walls, dams, side walks, etc., but a concrete adapted to the purpose for which it will be used. To-day the engineer can only think of concrete as a mixture of one part of cement, three parts sand and six parts crushed stone, or similar proportions of these materials. If you tell him not to use any sand at all, he is at sea. There is no one material capable of so many variations of aggregates, proportions and mixtures; therefore, it is simply a question of seeking the aggregates, proportion, and mixture which will give the results which are appropriate to the work to be done. A light colored concrete can be obtained by mixing white marble quarry screenings with other aggregates; for a dark concrete use trap rock, etc. The other aggregates to be composed of various kinds of crushed stone, a few broken brick, cinders and a little sand containing a small percentage of clay.

Keep in view the idea that the concrete described is not that which we see about us to-day. In this article I am speaking of an entirely different concrete, something that has not yet been used excepting in one or two instances where very good results were obtained.

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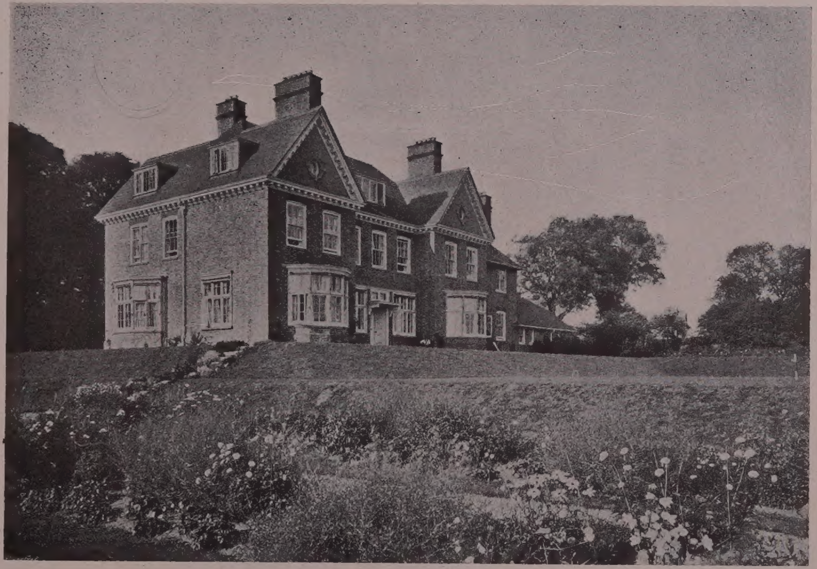
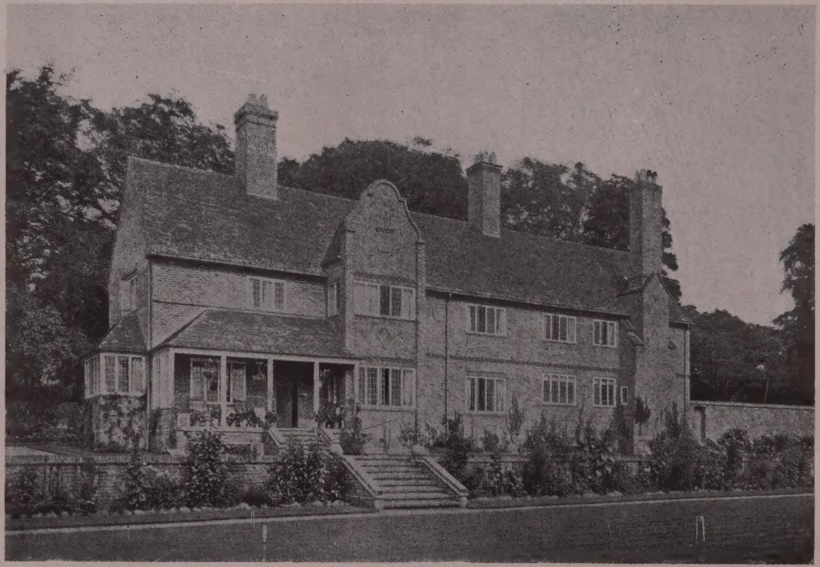
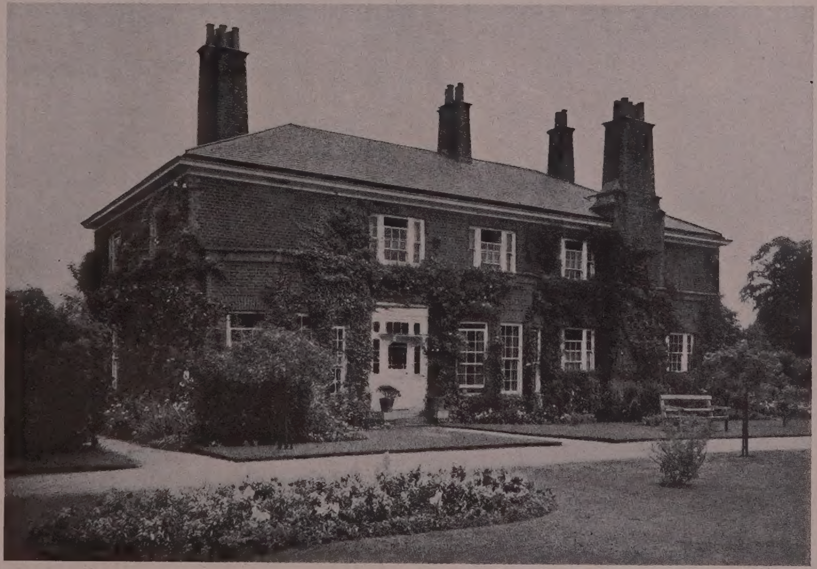


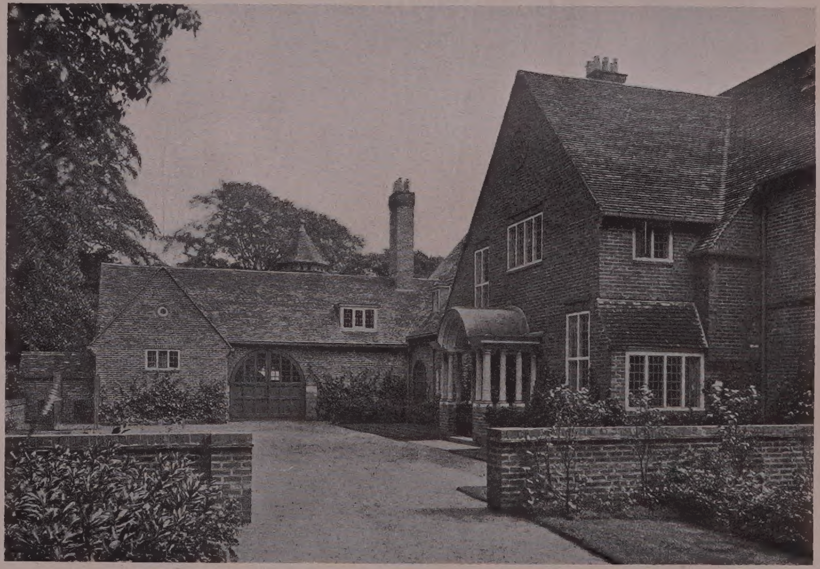
HOUSE, WICKERSLEY, EAST YORKSHIRE. John Bilson, Arch.



GARDEN FRONT, "REDLANDS," SUTTON COLDFIELD. Bateman & Bateman, Arch's.



HOUSE, KENILWORTH. H. M. Fletcher, Arch.



ENTRANCE COURT, "REDLANDS," SUTTON COLDFIELD. Bateman & Bateman, Arch's.

MONTHLY PICTORIAL REVIEW OF OUR ENGLISH CONTEMPORARIES.

(*Continued from page 169*)

This concrete need not be mixed dry in order that the mortar will not plaster against the board forms; it however, must not be mixed so wet that it will.

We do not wish the voids entirely filled as we get plenty of strength for a residence, a factor of safety as high as necessary, without entirely filling the voids. This does not leave holes in the concrete for the reason that the concrete used is fine all passing through a 3-4 inch mesh and graded down to particles the size of sand. This gives a surface which has the appearance of having been weathered the same as we find in some of the old stone abbeys of Southern France.

The ground or broken brick and cinders or other prominent aggregates do not show through in regular spots but are distributed throughout the entire mass—distributed in a manner which gives results similar to that which would be obtained if nature had made by process of age, a stone formed of similar material.

Economy can be practiced in the matter of walls by employing a method which will entirely do away with lath or furring. Plaster can be applied direct to the concrete wall which must be waterproof; this result is accomplished by several methods. I can offer two suggestions; one is to build half of the wall and waterproof the inside of that half with tar paper and asphaltum, move the board form back the remaining distance and fill in with cinder concrete to form the inside of the wall, no moisture from the outside can reach this cinder concrete which is porous by nature thus taking up such moisture from the plaster as might condense thereon due to the wall being cooler in winter than the room. Another method is to build a four inch inside wall of rough hollow terra cotta tile or cement hollow blocks, place the board forms at the outside of the wall and tamp in eight inches of concrete between the hollow tiles and the board forms. Waterproof the hollow tile on the side to which the plaster will be applied, using one of the well known paints to which plaster will adhere permanently. These hollow tiles serve a double purpose; they may be employed for ventilation, waterproofing and as a conduit for water pipes and electric wires. With either kind of a wall you have one which is a nonconductor of heat and cold and is water, fire, vermin and sound proof, ideal conditions for a dwelling; requires no painting, no repairs, increases in strength with age and is as durable as the everlasting hills. The floors may be supported by reinforced concrete girders or simply a flat floor reinforced by what is known as the "mushroom" method supported by pillars; or the floors may be of frame construction similar to that now used in frame houses. The latter will not be fireproof although, if of frame, the whole interior of the house could be consumed by fire without effecting the walls in the slightest. The method employed in obtaining an artistic treatment of the walls is simple and not an experiment as some will presume. The writer has seen several buildings in which these ideas have been partially carried out; from a structural standpoint they have proven successful; from an artistic standpoint they have been successful as far as the ideas along these lines have progressed. They would have been far more beautiful if the architect had thought less in terms of brick and stone carrying his ideas further along.

Imagine a solid concrete building so severely plain that it commands your instant attention, not as some buildings, whose gaudiness calls loudly for you to admire them. A concrete house treated as concrete does not seek admiration but by its very modesty, dignity and genuiness commands it. A dwelling constructed of Portland Cement Concrete is hand made. It is quiet, subdued and clearly beautiful. A wall so severely plain requires a touch of design and color; this is obtained in a most convenient and appropriate manner by the use of burned colored hand made tile used in a panel on each or every pilaster near top or center, and hand made burned colored clay mosaic as a round plaque set in an outside chimney or over a door or convenient window which may be so placed as to give that artistic touch to the whole scheme, which causes us to exclaim "Beautiful!" Windows and doorways may also be bordered with these tiles either glazed or unglazed as may suit the purpose. A horizontal band course of these hand made tiles may prove effective. The tile used for decorating concrete surfaces may be economically applied by inserting them inside of board forms, cement mortar plastered against them so as to fill in the space between each tile, the concrete to be tamped round and against them the same as if wood negatives had been used. This suggestion is not merely a theory or an experiment; the writer has seen one or two most beautiful examples of concrete decorated with hand made tiles, no one piece of which is of flat color, but artistic in the extreme and while made in this country without question or doubt rival and even surpass the old English and Byzantine tiles. Each tile may display a hand drawn design to accord with the decorative scheme. The colors are what might be described as earth colors the shades mastered by heat in most primitive manner giving appearance as if mellowed by age.

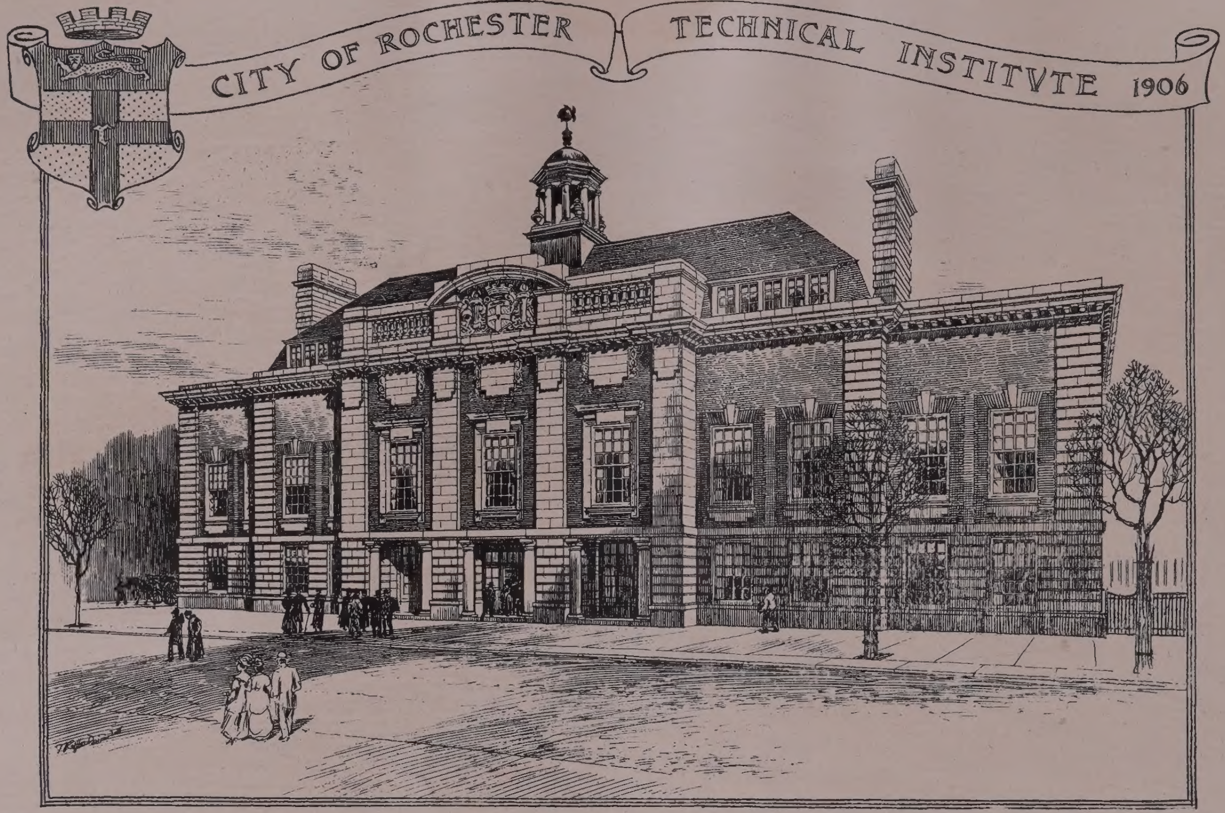
A hall way and even a living room could be designed so as to preserve the same texture, color and uneven shade of color for the inside of a room as appears on the outside of the wall. No plaster, paint or stain of any kind used, simply divide off the inside of the wall into panels made by wood negatives, nailed inside of the board form used in molding the wall; at the same time and by the same method decorating these panels with colored burnt clay hand made mosaic, bordered with the old hand made glazed or unglazed tiles, producing an effect similar and as beautiful as that found in some of the old Pompeian houses; portions of the wall not divided into smaller panels can be hung with old tapestry. Combine with this unvarnished hand made furniture and you have produced an artistic effect which is rivaled only in the old palaces.

The charm of the thatched hut and the old barn is the expansive roof, negative in tone and weathered, a foil to the rest of the building. The roof of a concrete dwelling is best if expansive with over hanging eaves.

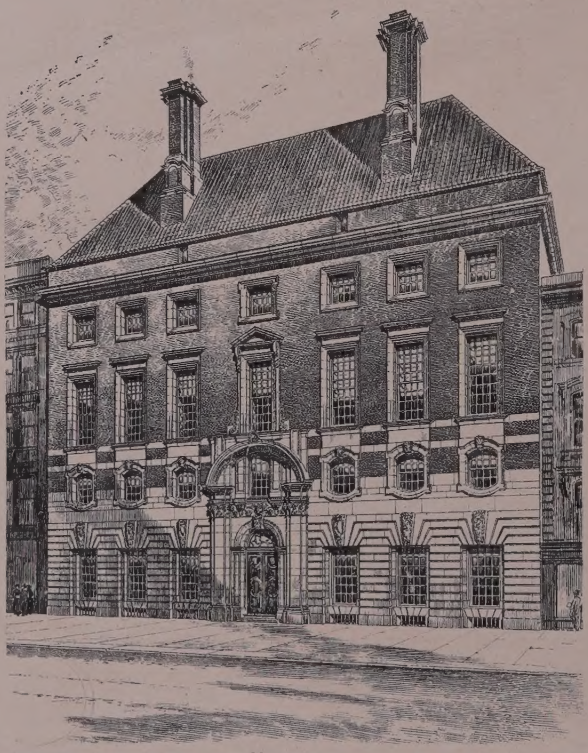
A new thought in connection with a reinforced concrete roof by which a more appropriate decoration is obtained, avoiding all straightness of line, is by the use of pieces of hand made clay tile in the simplest forms, overlapping them like shingles, or in any other way with wide cement joints. Straightness of line is avoided as the top of the concrete roof is not cast against a board. The concrete can be simply shoveled in or dumped in heaps. We can rake down or tamp over the wire mesh and iron bars and not straight edge the roof off.

After the concrete is hardened, waterproof roof with the usual asphaltum, and then apply these hand made irregular

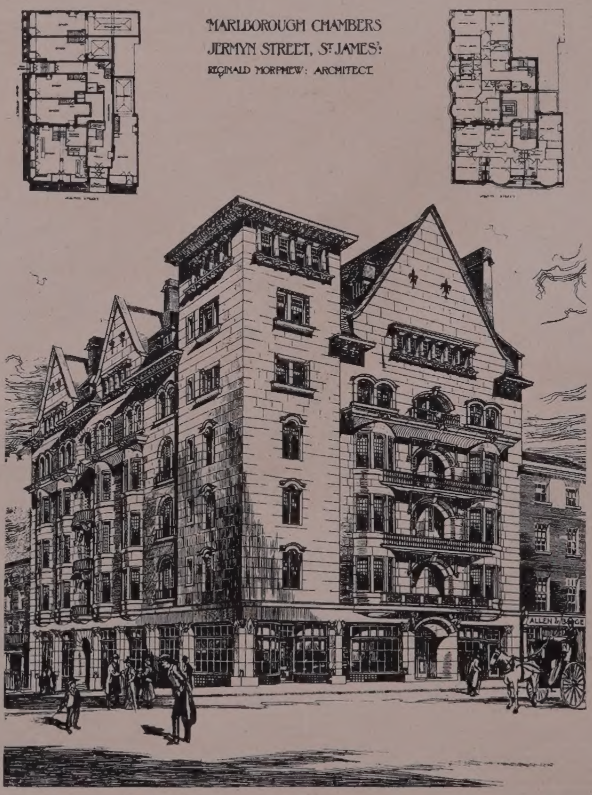
(*Continued page 175*)



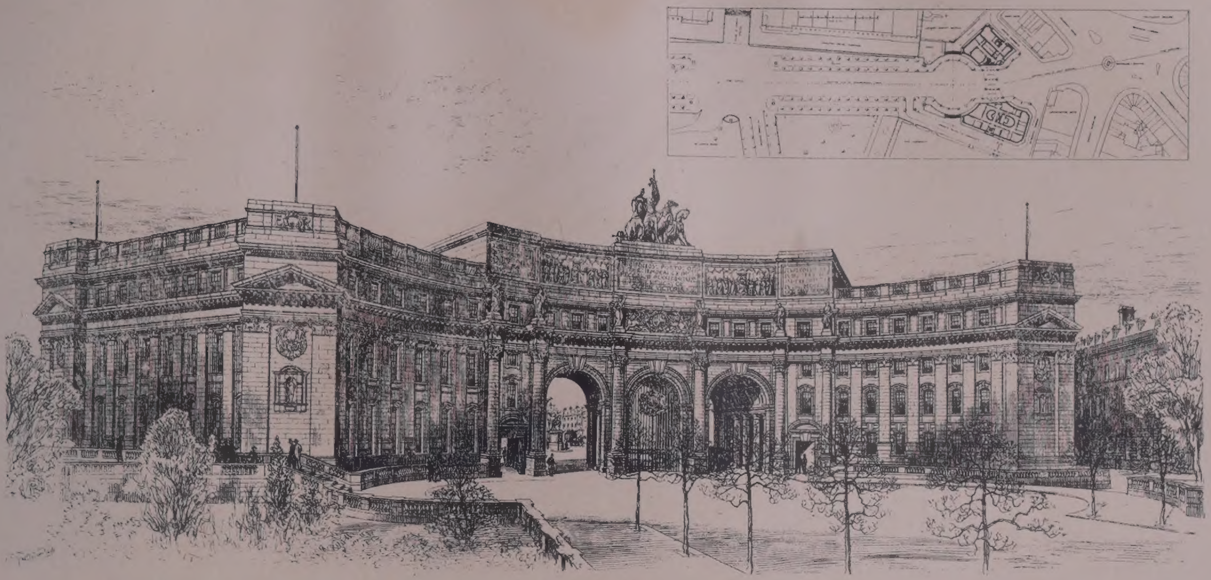
TECHNICAL INSTITUTE, ROCHESTER. Russell & Cooper, Arch's.



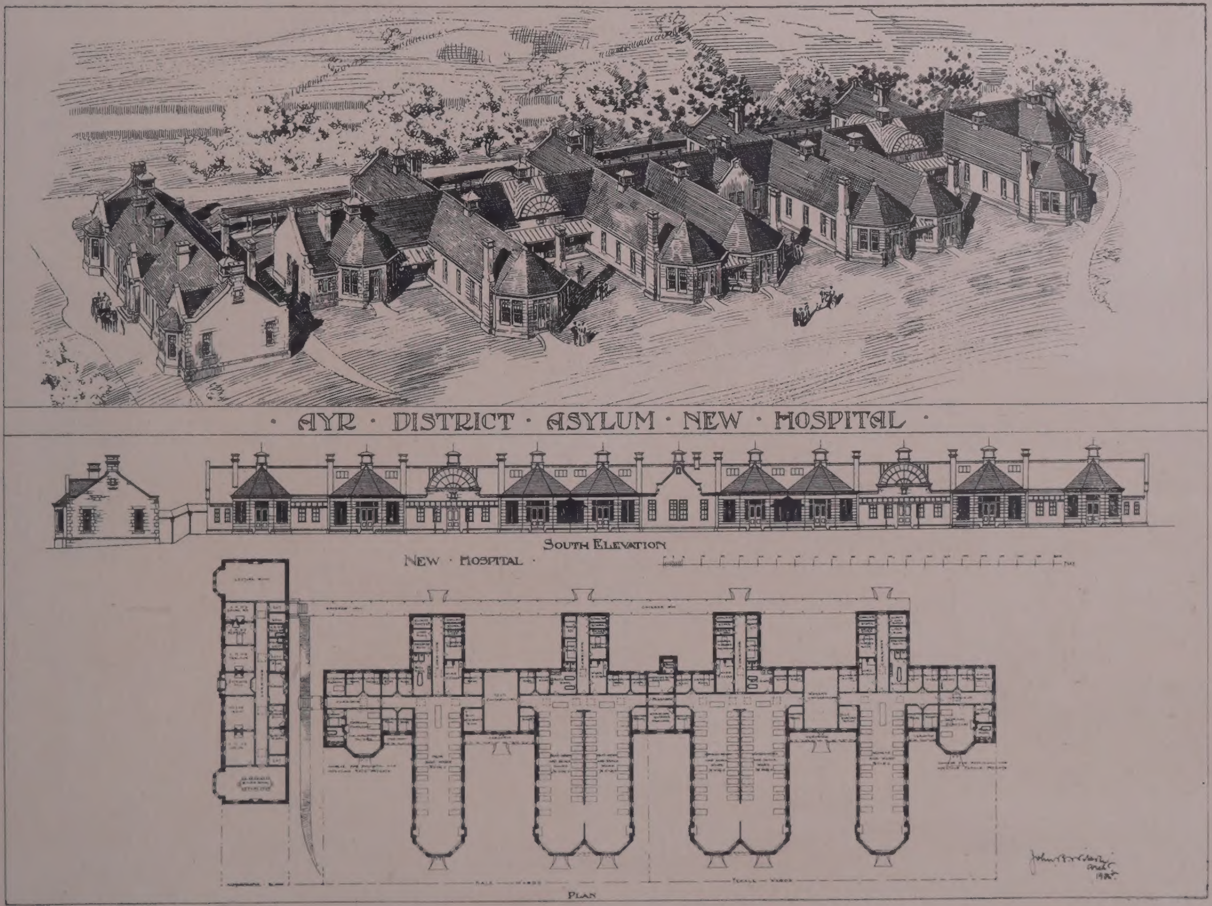
OFFICES, "COUNTRY LIFE," LONDON. E. L. Lutyens, Arch.



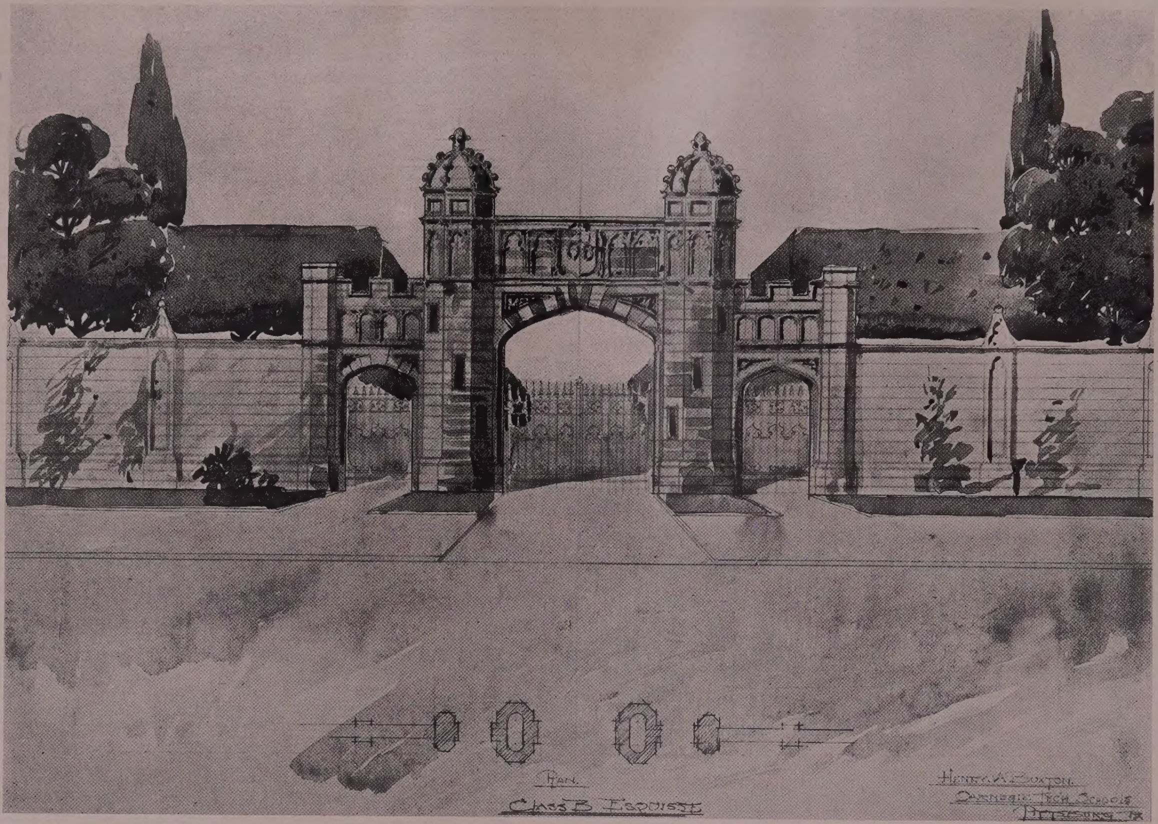
MARLBOROUGH CHAMBERS, LONDON, Richard Morphew, Arch.



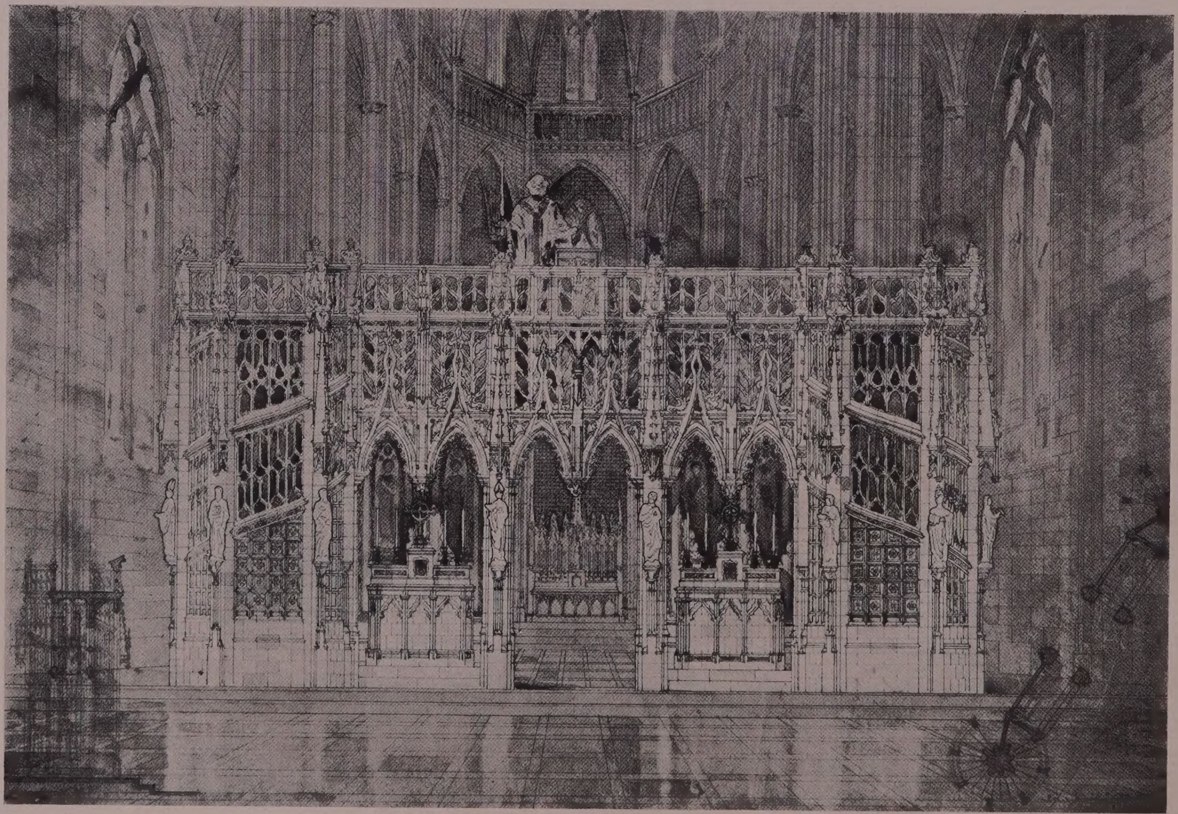
PROPOSED NEW BUILDING, EAST END OF THE MALL, LONDON. Sir Aston Webb, Arch.



HOSPITAL, AYR DISTRICT. John B. Wilson, Arch.



A CLASS GATEWAY. II Mention. H. A. Buxton, Atelier Carnegie.



A JUBÉ IN FLAMBOYANT GOTHIC. Placed I. Lawrence Clark, Atelier T. Square.

(Continued from page 171)

shaped clay tiles simply set in mortar. Consequently there are no repellant straight lines in the whole roof, no flat shade of color, and the roof is absolutely fireproof and waterproof, giving a series of waved outlines which nothing else but great antiquity produces.

In concrete work it is not necessary to use the so-called "S" roof tiles. These tiles were made specially to fasten upon a wooden structure. They had to be especially baked, lapped, etc. The units had to be about of one size. It is, therefore, seen that the irregular hand made flat primitive clay tiles are better adapted for the concrete roof, as we are thus working along the line of least resistance, and following the laws of nature's art. By the use of these tiles we have little and big units easily made and easily colored. You thus get color and artistic beauty at about thirty-five cents a square foot. Reds, blacks, greens, buffs, etc., which would be almost impossible in ordinary roof tiles, are in these hand made tiles the colors most easily obtained; furthermore, you get the evidence of the human touch. Artistic architects who want color and texture in the roof and are sending to the ends of the earth for hand made tile here find their answer.

The nearest approach to this texture is seen in some of the old slate roofs in Southern Ireland, where pieces of slate from three to five inches, rude hand cut rectangles three quarter-inch thick, have been set on old wooden roofs with heavy mortar joints. The whole roof having greatly bent and sagged making a beautiful effect all of which can be produced in a concrete roof as above described—plus color. For a wood frame roof mottled green "S" tiles with the appearance of having been weathered seems to serve the purpose most admirably furnishing an atmosphere in keeping with the rest of the building. Some prefer red tiles, these will serve the purpose if they be porous so that they become stained and colect the mosses.

It is a great problem to build a house which will not be an offense to its natural surroundings; to please the eye is to please the heart; build avoiding the appearance of newness and with the feeling of modesty, simplicity, dignity and repose. In a wooden building the structural features are hidden, we do not see the source of strength, the countenance is expressionless. The eye craves evidence of strength, honesty and stability, the whole effect should be alive with purpose. All nature makes friends with a plain solid substantial concrete house; it harmonizes with the trees and landscape, even the mosses, vines and birds are attracted to it. How the eye loves a genuine thing and delights in the nude beauty of honest substantial material, full of expression, meaning, and motive, the principle of construction open and obvious. The domestic life is quiet, informal, comfortable and private; when it seeks a dwelling the house should express the spirit within. The state edifice should be stately, the private dwelling cozy, unostentatious, comfortable; an atmosphere which is friendly and congenial. The influence of architecture on character especially in the home is a passive force for good and a betterment which is always with us.

Face the problem squarely, be true to the material employed and with perfect frankness let the rough exterior stand for what it is; be honest and genuine, and be content "like the oyster with roughest shells without so that he be sure of the mother-of-pearl within."

The Society of Beaux Arts Architects

INCORPORATED 1894.

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OFFICIAL ORGAN - - ARCHITECTURE.

ARCHAEOLOGY.

A JUBE IN FLAMBOYANT GOTHIC.

A JUBE is a choir screen surmounted by a gallery or platform from which are read the gospel and epistle on special feast days. The lower part, or screen, must be pierced by at least one doorway; and the gallery must be accessible from either end by spiral staircases which may encircle the pillars of the nave against which the screen abuts, or may be otherwise arranged.

The choir screens were from the XVth to the XVIIth centuries, the subjects for the utmost lavishness of sculpture; so that, cutting off as they did, the perspective of the nave, and concealing the splendors of the ritual from the faithful, they became the spot of supreme interest to the congregation.

The most noted examples may be found in the cathedrals of Albi and Rodey and the churches of Brou, Troyes and St. Etienne du-Mont in Paris.

The space for the Jubé exclusive of staircases shall not exceed 17 feet.

The esquisse, giving the plan section and elevation shall be made at ⅛-inch scale and shall show the staircase.

The rendu shall give the elevation and section at ½-inch scale and the plan at ¼ inch.

REPORT OF JUDGMENT.

A JUBÉ IN FLAMBOYANT GOTHIC

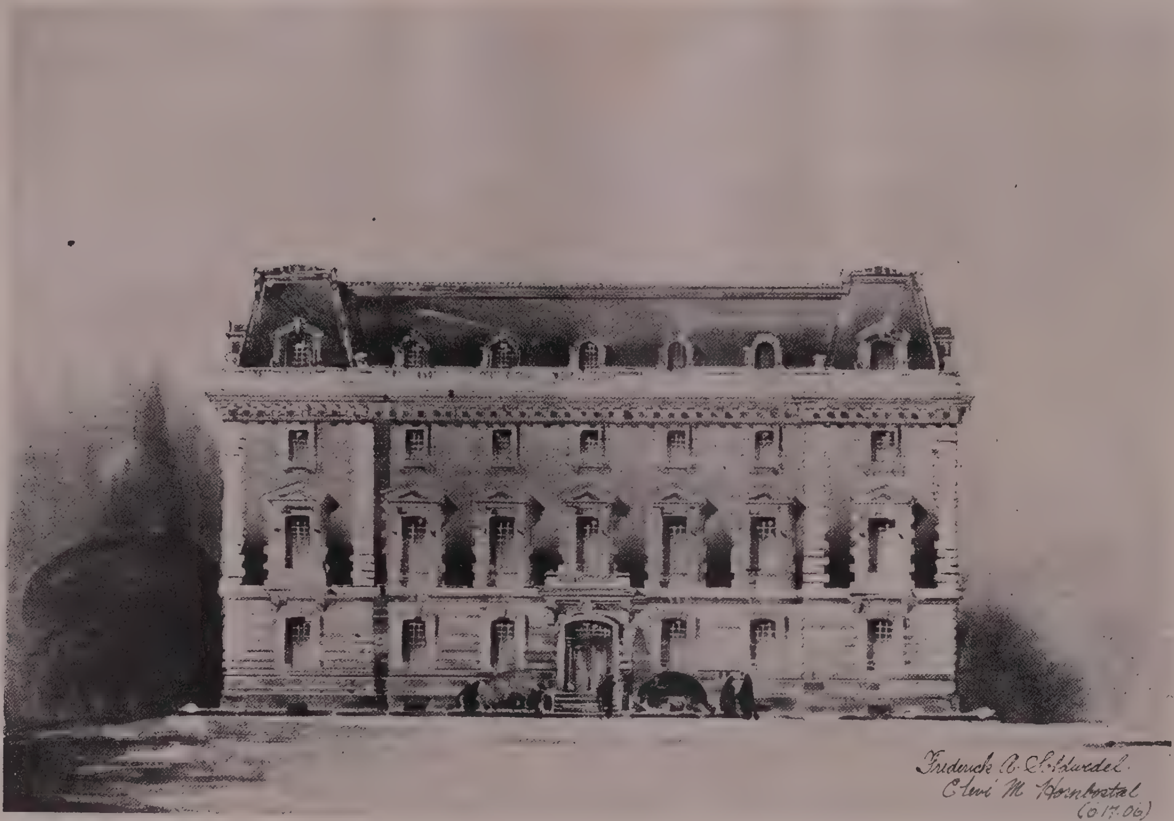
Sharpley, W. W.	Philadelphia	Atelier T Square Club	Mention
Maurer, Harry	Philadelphia	Atelier T Square Club	Mention
Clark, L.	Philadelphia	Atelier T Square Club	1st Mention
Vanderbilt, J. C.	Rochester	Atelier Bragdon	2d Mention
Chrisp, Hugh	Rochester	Atelier Bragdon	Mention
Van Allen, William	New York	Atelier Donn Barber	Mention

REPORT OF JUDGMENT.

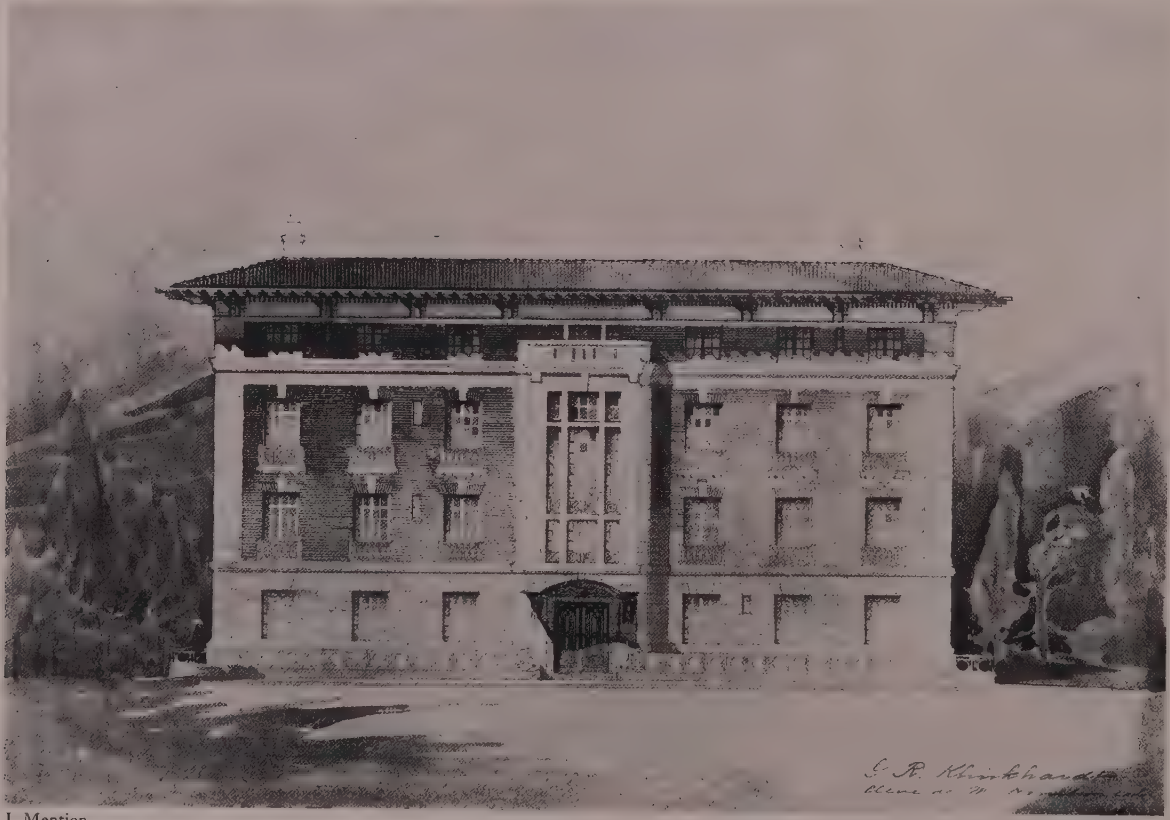
CLASS B PLAN. A PRIVATE CITY HOSPITAL.

Dorsey, L. M.	Philadelphia	Atelier Cret	2d Mention
Kleinhardt, G. R.	New York	Atolier Hornbostel	1st Mention
Whiteside, G. M.	New York	Atelier Hornbostel	
Willeke, L.	New York	Atelier Hornbostel	2d Mention
Soldwedel, F. A.	New York	Atelier Hornbostel	1st Mention
Romer, Chas.	New York	Atelier Hornbostel	1st Mention
Flanagan, Geo.	New York	Atelier Hornbostel	2d Mention
Pressler, C. J.	Pittsburgh	Atelier Hornbostel	H. C.
Reber, A. J.	Pittsburgh	Atelier Hornbostel	2d Mention
Bruton, F. A.	Pit.sburgh	Atelier Hornbostel	2d Mention
Macqueen J. M.	Pittsburgh	Atelier Hornbostel	
Powelson, F. W.	Pittsburgh	Atelier Hornbostel	H. C.
Pringle, Thos.	Pittsburgh	Atelier Hornbostel	
Johnson, La. F.	Pittsburgh	Atelier Hornbostel	
King, W. H,. Jr.	Pittsburgh	Atelier Hornbostel	
Roust, S. L.	Pittsburgh	Atelier Hornbostel	2d Mention
Robling, O. J.	Pittsburgh	Atelier Hornbostel	H. C.
Buxton, H. A.	Pittsburgh	Atelier Hornbostel	2d Mention
Chyrstie, E. P.	New York	Atelier J. H. Hunt	2d Mention
Study, Guy.	St. Louis	Atelier Wash. Univ.	2d Mention
Duncan, R. C.	St. Louis	Atelier Wash. Univ.	2d Mention
Langworthy, R. E.	New York	Atelier Donn Barber	1st Mention
Davis, J. W.	New York	Atelier Donn Barber	2d Mention
Cary, W. P.	New York	Atelier Donn Barber	

(Continued page 177)



I Mention. F. A. Soldwedel. Atelier Hornbostel.



I Mention. G. R. Kleinhardt, Atelier Hornbostel.

BEAUX ARTS COMPETITION—A PRIVATE CITY HOSPITAL.

(Continued from page 175)

REPORT OF JUDGMENT.

CLASS B ESQUISSE ESQUISSE. A CLASS GATEWAY.

Thompson, J. H.	New York	Atelier Hornbostel	2d Mention
Romer, Chas.	New York	Atelier Hornbostel	
Holland, Geo.	New York	Atelier Hornbostel	
Chrystie, E. P.	New York	Atelier Chappell & Ewing	
Wiley, H. E.	Minneapolis	Atelier Hewitt	
Saum, F. J.	St. Louis	Atelier Spiering	
Dorsey, L. M.	Philadelphia	Atelier Cret	
Roush, S. L.	Pittsburgh	Atelier Carnegie	
Green, W. H.	Pittsburgh	Atelier Carnegie	
Buxton, H. A.	Pittsburg	Atelier Carnegie	2d Mention
Reber A. J.	Pittsburgh	Atelier Carnegie	2d Mention

BOOK REVIEWS.

CONCRETE COUNTRY HOUSE. P. Austin Tomes. 1906. Atlas Portland Cement Co., New York. Price, $1.00

The age of originality and energy has wrought many changes in business forms and methods, raising the standard of every department to a higher effectiveness. It is seldom, however, that a manufacturer adopts the broad-minded policy demonstrated by the Atlas Portland Cement Company. Mr. P. Austin Tomes who conducts the Department of Publicity represents the spirit of his company and the touch of the expert is evident in his production "Concrete Country Houses." The making of the book represents a large expense of time, thought and money.

The questioning client must be satisfied and the profession is continually calling for more and more information regarding the adaptability of concrete. Mr. Tomes has succeeded in telling the whole story in picture writing which clearly says, "You can use concrete anywhere."

Almost a hundred pages of a large handsome book are devoted to illustrations, with a short foreword to explain its purpose. This is not a catalogue, it is valuable literature.

THE MODERN HOME. 1906. Edited by Walter Shaw Sparrow. Hodder & Stoughton, London. M. A. Vinson, Cleveland, Ohio.

This publication marks Volume V of an estimable series known as "The Art and Life Library." It treats of British Domestic Architecture for moderate incomes and has a special value to the American architect and owners who have lately shown a strong inclination to borrow and adapt the ideas of our English brothers who are the acknowledged ideal home builders.

RICH MEN'S MANSIONS.

THE homes of men of great wealth in New York have in recent years acquired an interest extending to others than their owners and the members of their families. In former years when a rich man built a house it was necessary for him to consult nobody's taste but his own. He could proudly claim that he had designed every feature of his home and dispense altogether with the services of an architect. He could even hand over the whole job to his upholsterer and let him build as he wanted. That practice has continued to the present day, and one noble monument of the sort is soon to be finished.

So long as there was nobody to be pleased but the owner, it made little difference who built his house or in what fashion it was built. The members of his family could always sell if they wanted to. Usually they did. Then the only harm done was the probable decline in price of the house for which even the increase in the value of the land could not quite compensate. The millionaire's home, however, satisfied his own taste.

But if the residences of the men who put up palaces to live in are to be handed over to the city, there may be the need of a broader surveillance over the plans of them. There might be a difference of opinion as to the artistic merit of the owner's ideas. Then the city might want to express its preference, or at least indicate the lines on which the acquisition of such a gift would be most useful.

It is doubtful if the residences of intending benefactors would be robbed of any beauty through some such co-operation. It is certain that as bequests to the city they could be made more acceptable.

ROCK ISLAND—FRISCO LINES.

Among our new advertisements will be noted that of the Industrial Department of the Rock Island-Frisco Lines.

The above department has jurisdiction over the lines of the Chicago, Rock Island & Pacific R. R., the St. Louis & San Francisco R. R. and the Chicago & Eastern Illinois R. R., and reaches seventeen states and territories. It necessarily follows, therefore, because of the vast extent of territory reached, and with such varying conditions, that desirable manufacturing locations for all classes of industry can be found along their rails.

The province of the Industrial Department is to advise the manufacturer regarding the best all-round industrial locations for his particular industry from the standpoint of accessibility to his raw materials, fuel supply, markets for finished product, favorable labor conditions and inducements procurable from local commercial organizations. The Rock Island-Frisco Industrial Department offers its aid and cooperation to all manufacturers and business men seeking new locations, and can furnish particulars regarding the above mentioned manufacturing requirements at cities along its rails. —A—

TO THE ARCHITECTS.

THE past year has proven the entire success of the policy adopted by the Chicago Varnish Company in its Architectural Department. This has included the offer to obtain for the architect any stain or finish on wood he may desire and suggest. While this is on the face of it a broad statement, the Company has been enabled to live up to it to the entire satisfaction of the architects who have specified the materials. The best talent obtainable has been secured for this department.

The Germans have made the greatest progress in the successful treatment of woods with stain and finish and to Germany the Company has gone for the man who from his laboratory in their New York building obtains effects on wood which heretofore have been deemed impossible in this country. Many of these stains show the natural tones of the wood and appeal especially to the more conservative of the Craft.

The deep rich brown seen in the woodwork of the cathedrals of the old world, is reproduced; the silvery gray taken on by wood long exposed to weather and salt air; the smoke blackened effect seen in old Flemish carved wood, may be obtained. The less costly woods such as chestnut, birch, ash and maple, show up excellently under these stains. Yellow pine, white pine and poplar all are susceptible of being beautified to a remarkable degree.

Mr. J. W. Whitehead, Jr., No. 1 Madison Avenue, has taken charge of the Architectural Department of the Chicago Varnish Company and has a collection of wood panels showing effects on different woods which have been obtained for leading architects of New York and other cities. These have been made to meet some color need as expressed in the architectural detail of the room in which they are to be used.

THE SCHOOLS OF ORNAMENT.*

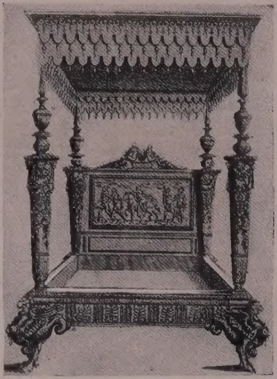
Copyrighted, 1904—Henry R. Towne.

Henry III.

Born at Fontainebleau 1551, died at St. Cloud 1589, Goujon, Du Cerceau.
Francois Briot.

ALTHOUGH son of Catharine de Medici and Henry II, Henry III would hardly seem to have been able to give personal encouragement to the arts in such troubled times. The style during his reign 1574-89 is, however, indicative that knowledge of ornament and decoration had not departed with the death of the father. He was the last of his branch of the Valois kings.

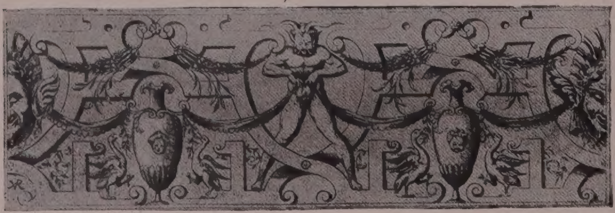
Jean Goujan's influence is still apparent in the masques of the Pont-Neuf and in other pieces done in his manner though not always by him. Jacques Androuet Du Cerceau, although the equal of Goujon in neither taste nor execution, nevertheless left interesting examples of his work in the reign of Henry III. He frequently introduced human and allegorical figures, roses, birds, grotesques and arabesques. In a Book of Friezes collected by Jombert, numerous good examples of this master's talent may be found. His ornament is rich, but at times overbalanced by its ponderous griffins and its rather gross and exceedingly muscular male genii. Masques with varying designs of crowns over the foreheads are presented in variety, and foliage as attenuated as the interlaces are heavy, which gives a peculiar contrast that is characteristic of the style. Du Cerceau also worked during the reign of Charles IX.



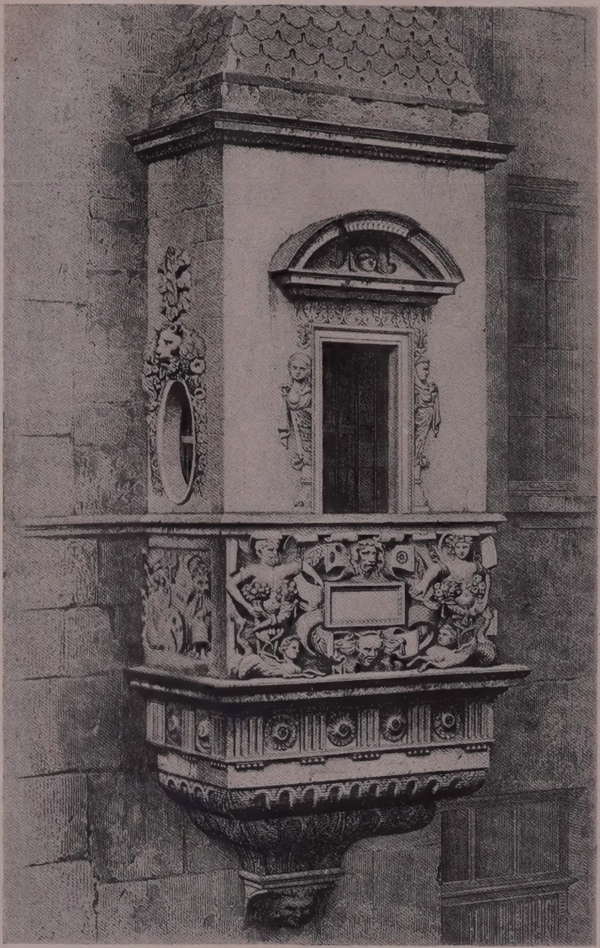
Bed by Du Cerceau.

There was more interesting work than Du Cerceau's done during this time, of which the accompanying arabesques give a hint.

One who wishes to distinguish the work of the reigns of the Henrys should refer to special works on the different periods. Even then it is difficult in each case to name the exact date of the ornament, the end of one period closely approaching in character the beginning of the next, as in all schools.



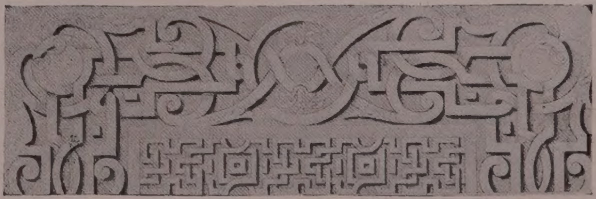
Frieze by Du Cerceau.



Oriel, Rue de la Vannerie, at Dijon.

Certain arabesques of this school are most effective both in their composition and the scale of the ornament. The panel is well filled, and the ornament, while rich, is so varied as not to tire the eye. It is, perhaps, asking too much of the student to try to emphasize this period of Henry III as producing a decided school in style; but while no great originality is shown, the skill with which ornament is handled and the traditions thereof handed down, would seem to make it imperative that the chain should not be broken by the omission of the age of Henry III from these articles.

Here, for instance, are four arabesques, and while the work is heavy and not an improvement upon the Italian art, which evidently inspired it, yet the concavity of the cartouches charmingly used to set off the quaint figures intermingled with them, and the masques, fruit and flowers and grotesques are certainly done by no bungling hand.



Frieze by Du Cerceau.

The effect sought is obtained; this is apparent at a glance, and a high plane of decoration is attained by very simple means, which fact argues talent of considerable degree.

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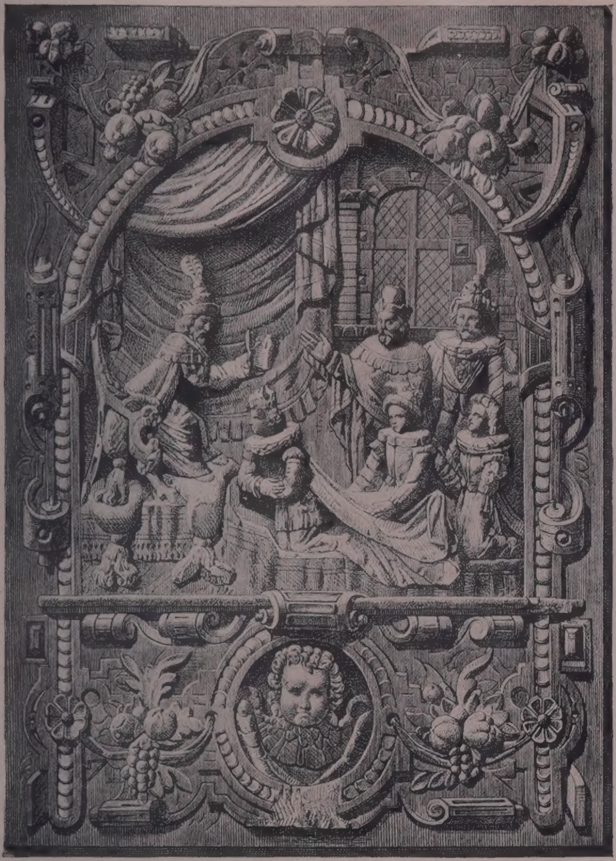
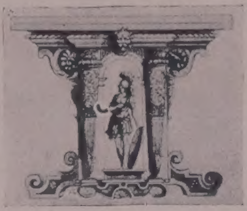
* A series of articles written by Mr. William Winthrop Kent, Architect, forming part of "A Treatise on Locks and Builders' Hardware." by Henry R. Towne, President of the Yale & Towne Mfg. Co., and Past President of the American Society of Mechanical Engineers. This book is profusely illustrated and contains more than 1100 pages, 4x6½". John Wiley & Sons, Publishers. Price, $3.00. It is the intention of the publishers of ARCHITECTURE to reprint one school in each number.

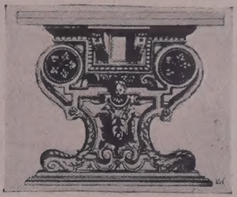


Carved Wooden Panel. Henry III as King of Poland.

Du Cerceau's tables and other furniture show decided appreciation of the value of ornament, and pave the way for those later masters of French carving, who eclectically drawing from not only these but other sources, such as the work of the peasants, have left examples of design in the collections of Europe full of rich significance, telling most pointedly what a man can do with a chisel and talent. The French are the legitimate heirs of the Italian Renaissance, and that the inheritance fell into worthy hands nothing tells better than the work of the lesser masters in carving in wood and stone. Where can be found more beautiful examples of ornament than are seen on the historic buildings of France and on the exquisite tables, chairs, coffers and cabinets with which these buildings were usually furnished. Into the designs of mantels especially, the French designer seemed to put his best thought, and they are excelled by the Italians alone, in the magnificent results so familiar to the student of the interior architecture of dwelling, chateau or public building from the XVth to the XVIIIth Century. Perhaps no collection gives a better idea of all this than the Cluny Museum in Paris. There may be traced the rise of Renaissance art from mediæval times to its degeneracy, and in the most interesting way through the excellence of the examples exhibited.



Table, Du Cerceau.



Table, Du Cerceau.

Francois Briot, about the date of whose birth there is some confusion, probably worked in this period. He was an excellent designer in silver and gold, a goldsmith in fact, and is represented at thirty years old in a costume of the time of Henry III, according to documents in the Cluny Museum, which possesses one of the rare examples of this master.

Without study one is apt to confuse ornament of this period with that of Henry IV.

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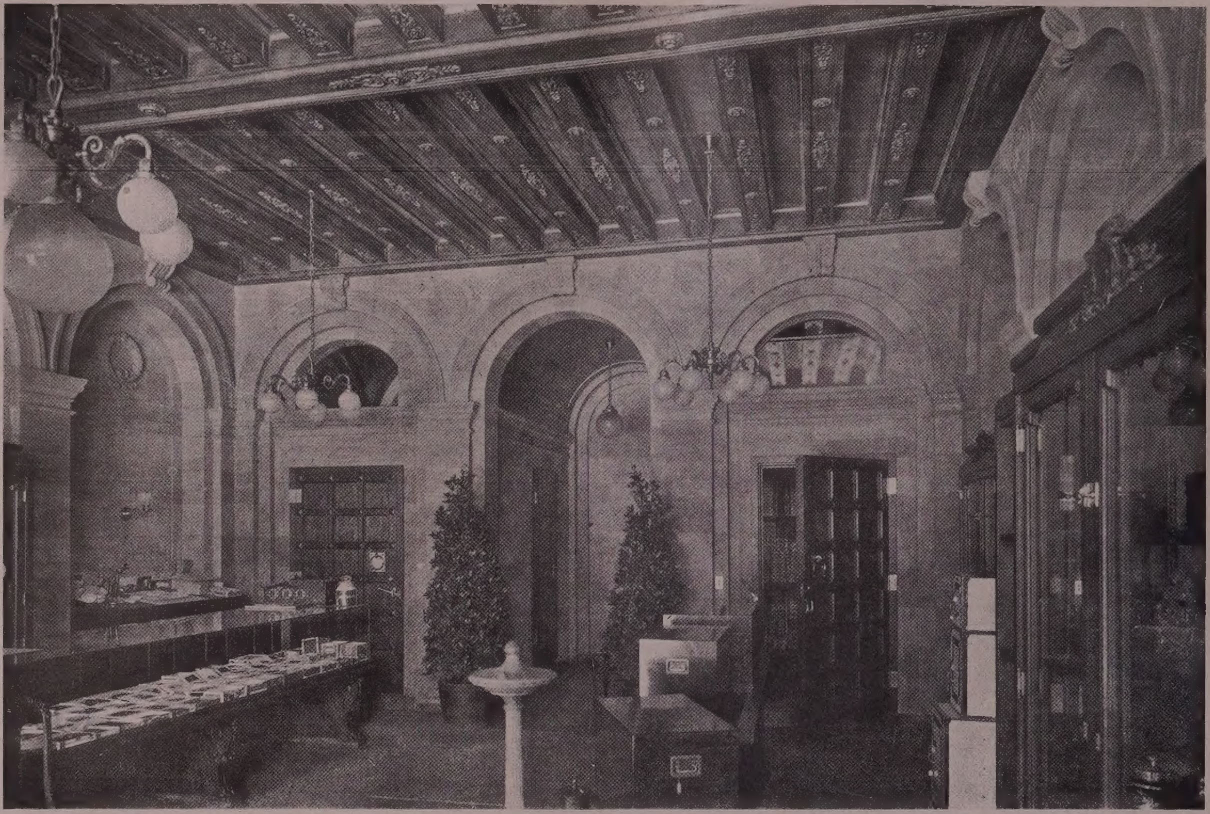
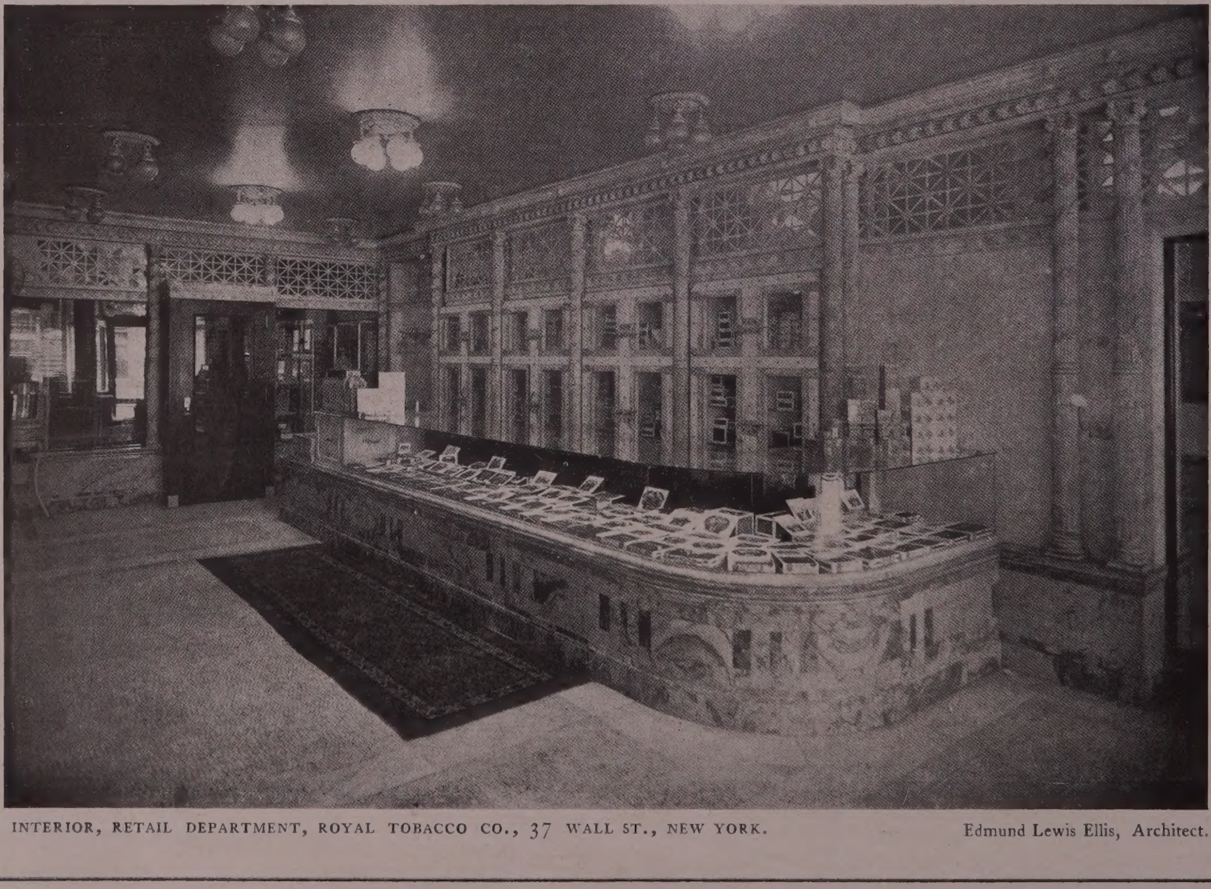


INTERIOR, RETAIL DEPARTMENT, ROYAL TOBACCO CO., 332 FIFTH AVE., NEW YORK. Edmund Lewis Ellis, Architect.



INTERIOR, RETAIL DEPARTMENT, ROYAL TOBACCO CO., 37 WALL ST., NEW YORK. Edmund Lewis Ellis, Architect.